<u>IN THE CLAIMS:</u>

Please amend the claims as follows:

1. (Currently Amended) A method for detecting signaling connection control part (SCCP) looping in a telecommunications network, the method comprising:

    (a)   receiving, at a signaling message routing node, an SCCP message from an originating node;

    (b)   performing global title translation (GTT) for the SCCP message and thereby determining a destination point code (DPC) for the signaling message;

    (c)   comparing the post-GTT DPC with a first point code stored in a message transfer part (MTP) originating point code (OPC) associated with the SCCP message;

    (d)   in response to detecting a match in step (c), identifying the presence of SCCP looping for the SCCP message;

    (e)   in response to failing to detect a match in step (c), mapping the first point code to at least one second point code <u>of a plurality of point codes used to identify the originating node</u>;

    (f)   comparing the post-GTT DPC to the <u>at least one</u> second point code; and

    (g)   in response to detecting a match in step (f), identifying the presence of SCCP looping for the signaling message.

2. (Original) The method of claim 1 wherein steps (a)-(g) are performed at a signal transfer point (STP).

3.   (Original) The method of claim 1 wherein the SCCP message comprises a database query.

4.   (Original) The method of claim 3 wherein the database query comprises a message requiring local number portability (LNP) message relay service.

5.   (Original) The method of claim 3 wherein the database query comprises a local number portability (LNP) query.

6.   (Original) The method of claim 1 wherein mapping the first point code to at least one second point code includes mapping the first point code to a capability point code of the originating node and wherein step (f) includes comparing the post-GTT DPC to the capability point code.

7.   (Currently Amended) The method of claim 1 wherein comparing the post-GTT DPC to the at least one second point code includes:

(a)   determining whether the first point code is associated with an adjacent node or a non-adjacent node;

(b)   determining whether a post-GTT destination for the SCCP message is an adjacent node or a non-adjacent node;

(c)   determining whether the post-GTT destination is in a concurring direction or an opposing direction with respect to a direction from which the SCCP message was received in a predetermined network topology map; and

(d)   using results from the determinations with regard to message direction, message origination adjacency, and message destination adjacency to

identify a set of point codes to which the first point code should be mapped; and

(e)   comparing post-GTT DPC to point codes in the set.

8.   (Original) The method of claim 1 wherein mapping the first point code to at least one second point code includes mapping the first point code to a set of capability point codes associated with STPs in addition to the originating node and wherein comparing the post-GTT DPC to the second point code includes comparing the post-GTT DPC to point codes in the set.

9.   (Original) The method of claim 1 wherein mapping the first point code to at least one second point code includes mapping the first point code to a set of true point codes associated with STPs in addition to the originating node and wherein comparing the post-GTT DPC to the second point code includes comparing the post-GTT DPC to point codes in the set.

10.   (Currently Amended) A method for identifying and preventing signaling connection control part (SCCP) looping, the method comprising:

(a)   receiving an SS7 signaling message from a first node, the signaling message having an originating point code (OPC), a destination point code (DPC), and a global title address;

(b)   global title translating the global title address to determine a new DPC for the signaling message;

(c)   comparing the OPC to the new DPC to determine whether SCCP looping is present;

(d)   in response to determining that the OPC matches the new DPC, identifying the presence of SCCP looping; and

(e)   in response to determining that the OPC does not match the new DPC, applying SCCP loop detection logic to correlate the OPC or the DPC with one or more additional point codes <u>of plural point codes used to identify an originating or destination node for the signaling message</u> and determining whether SCCP looping is present based on the correlation.

11.   (Original) The method of claim 10 wherein determining whether SCCP looping is present includes identifying the presence of SCCP looping when a point code to which the OPC correlates matches the DPC or a point code to which the DPC correlates matches the OPC.

12.   (Currently Amended) A method for selective signaling connection control part (SCCP) loop detection, the method comprising:

(a)   receiving an SCCP message including an originating point code (OPC) associated with an originating node;

(b)   global title translating the SCCP message and determining a destination point code (DPC) associated with a destination for the SCCP message;

(c)   correlating the OPC or the DPC to a set <u>including a plurality</u> of point codes <u>used to identify one of the originating and destination nodes</u>, the set being selected based on the originating node, the destination node, and a direction associated with the SCCP message; and

(d)   identifying the presence of SCCP looping based on the OPC or the DPC being equal to a point code in the set of point codes.

13.   (Currently Amended) A signaling message routing node comprising:

(a)   a communications link module for receiving a signaling connection control part (SCCP) message from an originating node;

(b)   a global title translation engine operatively associated with the communications link module for performing global title translation for the SCCP message to produce a destination point code (DPC) for the SCCP message; and

(c)   an SCCP loop detector operatively associated with the global title translation engine for comparing the post-GTT DPC associated with the SCCP message to a first point code stored in a message transfer part (MTP) originating point code (OPC) field associated with the SCCP message, and, in response to detecting a match, for indicating the presence of SCCP looping and, in response to failing to detect a match, for comparing the post-GTT DPC with at least one second point code <u>of a plurality of point codes used to identify the originating node</u> to identify the presence of SCCP looping.

14.   (Original) The signaling message routing node of claim 13 wherein the communications link module comprises an SS7 communications link module for sending and receiving SS7 messages over an SS7 network.

15.   (Original) The signaling message routing node of claim 13 wherein the communications link module comprises an IP communications link module for sending and receiving IP-encapsulated SS7 messages over an IP network.

16.   (Original) The signaling message routing node of claim 13 wherein the global title translation engine is adapted to perform intermediate global title translation of the SCCP message.

17.   (Original) The signaling message routing node of claim 13 wherein the GTT engine is adapted to perform final global title translation of the SCCP message.

18.   (Original) The signaling message routing node of claim 13 wherein the SCCP loop detector is adapted to map the first point code to a predetermined set of point codes and to compare the post-GTT DPC with point codes in the set.

19.   (Original) The signaling message routing node of claim 18 wherein the predetermined set of point codes includes a capability point code of the originating node.

20.   (Original) The signaling message routing node of claim 18 wherein the predetermined set of point codes includes capability point codes associated with nodes in addition to the originating node.

21.   (Original) The signaling message routing node of claim 18 wherein the predetermined set of point codes includes true point codes associated with nodes in addition to the originating node.

22.   (Original) The signaling message routing node of claim 13 wherein the SCCP loop detector in adapted to determine a direction for the SCCP message after

global title translation, whether the originating node is adjacent to the signaling message routing node and whether a post-GTT destination for the SCCP message is adjacent to the signaling message routing node.

23.   (Original) The signaling message routing node of claim 22 wherein the SCCP loop detector is adapted to select the second point code to compare with the post-GTT DPC based on the adjacency and direction determinations.

24.   (Currently Amended) A ~~computer program product~~ processor card for detecting signaling connection control part (SCCP) looping in a telecommunications network, the ~~computer program product comprising computer-executable~~ the processor card including at least one processor that executes instructions embodied in a computer-readable medium for performing steps comprising:

(a)   receiving, at a signaling message routing node, an SCCP message from an originating node;

(b)   performing global title translation for the SCCP message and thereby determining a destination point code (DPC) for the SCCP message;

(c)   comparing the post-GTT DPC with a first point code stored in a message transfer part (MTP) originating point code (OPC) field associated with the SCCP message;

(d)   in response to detecting a match in step (c), identifying the presence of SCCP looping for the SCCP message;

(e)   in response to failing to detect a match in step (c), mapping the first point code to at least one second point code <u>of a plurality of point codes used to identify the originating code</u>;

(f)   comparing the post-GTT DPC to the <u>at least one</u> second point code; and

(g)   in response to detecting a match in step (f), identifying the presence of SCCP looping for the signaling message.

25.   (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 24 wherein steps (a)-(g) are performed at a signal transfer point (STP).

26.   (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 24 wherein the SCCP message comprises a database query.

27.   (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 26 wherein the database query comprises a message requiring local number portability (LNP) message relay service.

28.   (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 26 wherein the database query comprises a local number portability (LNP) database query.

29.   (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 24 wherein mapping the first point code to at least one second point code includes mapping the first point code to a capability point code of the originating node and wherein step (f) includes comparing the post-GTT DPC to the capability point code.

30. (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 24 wherein comparing the post-GTT DPC with at least one second point code includes:

(a) determining whether the first point code is associated with an adjacent node or a non-adjacent node;

(b) determining whether a post-GTT destination for the SCCP message is an adjacent node or a non-adjacent node;

(c) determining whether the post-GTT destination is in a concurring direction or an opposing direction with respect to a direction from which the SCCP message was received in a predetermined network topology map;

(d) using results from the determinations with regard to message direction, message origination adjacency, and message destination adjacency to identify a set of point codes to which the first point code should be mapped; and

(e) comparing the post-GTT DPC to point codes in the set.

31. (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 24 wherein mapping the first point code to at least one second point code includes mapping the first point code to a set of capability point codes associated with STPs other than the originating node and wherein comparing the post-GTT DPC to the second point code includes comparing the post-GTT DPC to point codes in the set.

32.   (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 24 wherein mapping the first point code to at least one second point code includes mapping the first point code to a set of true point codes associated with STPs other than the originating node and wherein comparing the post-GTT DPC to the second point code includes comparing the post-GTT DPC to point codes in the set.

33.   (Currently Amended) A ~~computer program product~~ <u>processor card</u> for identifying and preventing signaling connection control part (SCCP) looping, the ~~computer program product comprising computer-executable~~ <u>the processor card including at least one processor that executes</u> instructions embodied in a computer-readable medium for performing steps comprising:

   (a)   receiving an SS7 signaling message from a first node, the signaling message having an originating point code (OPC), a destination point code (DPC), and a global title address;

   (b)   global title translating the global title address to determine a new DPC for the signaling message;

   (c)   comparing the OPC to the new DPC to determine whether SCCP looping is present;

   (d)   in response to determining that the OPC matches the new DPC, identifying the presence of SCCP looping; and

   (e)   in response to determining that the OPC does not match the new DPC, applying SCCP loop detection logic to correlate the OPC or the DPC with

one or more additional point codes <u>of plural point codes used to identify an</u> <u>originating or destination node for the signaling message</u> and determining whether SCCP looping is present based on the correlation.

34. (Currently Amended) The ~~computer program product~~ <u>processor card</u> of claim 33 wherein determining whether SCCP looping is present includes identifying SCCP looping when a point code to which the OPC correlates matches the DPC or a point code to which the DPC correlates matches the OPC.

35. (Currently Amended) A ~~computer program product~~ <u>processor card</u> for selective signaling connection control part (SCCP) loop detection, the ~~computer program~~ ~~product comprising computer-executable~~ <u>the processor card including at least</u> <u>one processor that executes</u> instructions embodied in a computer-readable medium for performing steps comprising:

(a) receiving an SCCP message including an originating point code (OPC) associated with an originating node;

(b) global title translating the SCCP message and determining a destination point code (DPC) associated with a destination for the SCCP message;

(c) correlating the OPC or the DPC to a set <u>including a plurality</u> of point codes <u>used to identify one of the originating and destination nodes</u>, the set being selected based on the originating node, the destination node, and a direction associated with the SCCP message; and

(d) identifying the presence of SCCP looping based on the OPC or the DPC being equal to a point code in the set of point codes.